



**REFORMING  
THE U.S. HARDROCK MINING LAW  
OF 1872:**

**THE PRICE  
OF INACTION**

THE PEW CAMPAIGN FOR  
**RESPONSIBLE MINING**  
RECLAIM OUR FUTURE





## INTRODUCTION

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The nation's hardrock mining industry owes an enormous debt to President Ulysses S. Grant. For more than a century it has operated under a law he signed in 1872 which now allows companies to extract billions of dollars worth of precious metals, pay no royalties and frequently avoid liability for environmental damage. At the same time, the industry receives millions of dollars in tax breaks, and taxpayers are left with huge costs for repairing environmental damage and lost federal revenue of an estimated \$160 million annually. This giveaway continues in the face of the current fiscal crisis, and the 110<sup>th</sup> Congress failed to address the problem.

## THE PROBLEM

Hardrock mining today is a billion dollar global industry, but it operates under a law that has not been substantially updated for 136 years. The 1872 Mining Law signed by President Ulysses S. Grant to encourage development of the frontier, still governs the mining of gold, uranium and other hardrock metals on U.S. public lands in the West. Consequently, this multi-national industry enjoys essentially the same free reign on public lands that prospectors with pack mules had over a century ago. Under this outdated regulatory framework, the hardrock mining industry is:

- Not required to pay royalties for minerals taken from federal public lands;
- Not obligated to share in the cost of cleanup for old, abandoned mines; and
- Not subject to modern environmental standards that protect water quality, farmland, and fish and wildlife habitat from the release of toxic chemicals.

## A GOLDEN OPPORTUNITY LOST

At the start of the 110<sup>th</sup> Congress, prospects for revamping this legislative relic appeared bright. The Chairman of the House Committee on Natural Resources, Nick Rahall (D-WV), led an effort that culminated with House passage of a bipartisan measure in November 2007 to modernize mining's outdated law. The *Hardrock Mining and Reclamation Act* (**H.R. 2262**), instituted royalty payments for minerals taken from public lands, established modern environmental standards and bonding requirements for mine operations and accelerated cleanup of abandoned mines.

In the Senate, Energy and Natural Resources Chairman Jeff Bingaman (D-NM) conducted

a series of hearings on the issue, and Majority Leader Harry Reid (D-NV), fourth-term Senator from the nation's largest gold-producing state, vowed cooperation to find a reasonable approach to mining reform. Even the Bush Administration expressed interest in considering a royalty on production.

A diverse group of stakeholders across the country, including western governors and other elected officials, conservation groups, sportsmen, the outdoor recreation industry and prominent jewelers called on the Senate to pass a reasonable reform package.

But the mining industry intervened and the 110<sup>th</sup> Congress failed to pass even a modest measure to modernize the nation's mining law. As a result, a rare opportunity to update what is arguably the nation's most archaic regulatory structure has been lost at the expense of American taxpayers who must continue paying an ever higher bill for mine cleanup.

## PRICE TAG OF INACTION

To assess the cost of this inaction, the Pew Campaign for Responsible Mining reviewed federal government data as well as several legislative proposals that have been introduced to modernize the law. We found that failure by Congress to require the mining industry to pay royalties on minerals taken from federal public lands, added to various tax breaks and subsidies companies enjoy, will cost American taxpayers more than \$160 million annually—an estimated \$1.6 billion over the next decade. This amount does not include an additional \$20 billion to \$54 billion in cleanup costs, much of which will be paid by taxpayers.

### **\$1 BILLION WORTH OF METALS TAKEN —\$40 MILLION ANNUALLY LOST IN ROYALTIES**

The Congressional Budget Office (CBO) estimates that roughly \$1 billion worth of hardrock minerals are extracted each year from America's public lands. Based on CBO's projections, if the mining reform measure passed last year by the U.S. House had been adopted by the Senate and signed into law, the federal treasury would have realized approximately \$160 million in new revenues from 2009 through 2012. The \$40 million per year figure would reach \$400 million in a 10-year period. This calculation uses royalty rates set out in H.R. 2262, the *Hardrock Mining and Reclamation Act*, which called for a 4 percent royalty on existing mines and an 8 percent royalty on new mines. In contrast, coal mining companies in the U.S. pay royalties as high as 12.5 percent to the Treasury. CBO's figure assumes there would be no new hardrock mining operations on U.S. public lands subject to the higher, 8 percent royalty until 2017. This conservative estimate was made, despite the fact that several large-scale projects are likely to be operating in the near future, including expansion of Barrick Gold Corp.'s Cortez Hills mine in Nevada, which would be subject to an 8 percent royalty under the House bill.<sup>1</sup>

### **\$1 BILLION WORTH OF METALS TAKEN —\$29 MILLION ANNUALLY LOST IN RECLAMATION FEES**

Cleanup costs of abandoned hardrock mines generally fall to taxpayers because, in contrast to coal mining, there is no industry-supported remediation program. For nearly 30 years,

coal mining operations in the U.S. have paid a fee on coal production to fund reclamation of abandoned mines. The *Abandoned Mine Reclamation Act (S. 2750)*, introduced by Senator Dianne Feinstein (D-CA), would have created a hardrock mine cleanup program funded by a 0.3 percent fee on the value of hardrock minerals extracted. No CBO estimate of revenues from this measure is available. Based on mine production statistics maintained by the U.S. Geological Survey<sup>2</sup> for 2000 through 2006, however, such a reclamation fee could contribute, by a conservative estimate, \$29 million<sup>3</sup> to the U.S. Treasury each year. That represents a minimum of \$290 million in lost funding for cleanup over the next decade.

### **\$1 BILLION WORTH OF METALS TAKEN —PLUS \$100 MILLION ANNUALLY GIVEN IN U.S. TAX BREAKS**

In addition to the royalty-free mineral giveaway, federal tax policy offers another significant and costly subsidy to the mining industry—the percentage depletion allowance. Dubbed a “reverse royalty” by economic experts, the percentage depletion allowance lets mining companies deduct a set amount from their taxable income each year, regardless of the amount of their investment in the mine. In many instances, the amount of the deduction exceeds the amount of investment. According to a Senate letter co-authored by Senators Russ Feingold (D-WI) and John Sununu (R-NH), the percentage depletion allowance and other tax breaks result in an effective tax rate for many mining companies that is much lower than the statutory corporate rate of 30 percent paid by other businesses.<sup>4</sup> To

eliminate the subsidy, Senator Feingold introduced the *Elimination of Double Subsidies for the Hardrock Mining Industry Act (S. 2287)*. Based on data from the Congressional Joint Committee on Taxation, passage of this bill would have saved taxpayers \$100 million annually in subsidies to companies operating hardrock mines on public lands, or \$1 billion over the next decade.<sup>5</sup>

**\$2.6 BILLION PAID BY TAXPAYERS FOR CLEANUP SINCE 1998— AT LEAST \$20 BILLION MORE DUE**

Mining generates a disproportionate amount of pollution and waste. According to the Environmental Protection Agency (EPA), hardrock mining generates more toxic waste than any other economic sector. Overall, hardrock mine operations released at least 18 billion pounds of toxics into the environment between 1998 and 2006.<sup>6</sup> The most recent data for 2005 and 2006<sup>7</sup> show that hardrock mining was responsible for 91 percent of all reported releases of the toxic chemical arsenic, a known carcinogen. The mining sector was also the top emitter of lead and mercury, two potent neurotoxins that are of particular concern for their impact on children. The mining sector was responsible for 84 percent of all U.S. releases of lead and 86 percent of all reported releases of mercury.

But the giveaway of public resources and corporate tax breaks mean that American taxpayers too often are stuck paying the cleanup cost. According to the Government Accountability Office (GAO), four federal agencies—the Bureau of Land Management (BLM), the Forest Service, the Office of Surface Mining, and EPA—spent at least \$2.6 billion to clean up

abandoned hardrock mines between fiscal years 1998 and 2007.<sup>8</sup> And that is just a fraction of the total outstanding reclamation cost. There is no comprehensive federal inventory of abandoned hardrock mines—estimates range from 250,000 to 500,000—yet these sites dot the landscape, contaminating water and soil and sometimes contributing to injury and death. In July 2008, the Department of Interior’s Inspector General (IG) offered a harsh assessment of the cleanup status of abandoned mines on property managed by the BLM and the National Park Service. The IG cited “serious environmental and safety hazards where members of the public had been killed, injured, or exposed to dangerous contaminants,” and concluded that “[t]he potential for more deaths and injuries is ominous.”<sup>9</sup>

Taxpayers must pay the cleanup costs not only of older mines but also for the all too common instances when owners of modern mines declare bankruptcy or otherwise escape their environmental obligations. Since 1994, more than two dozen mine-related sites have been listed as Superfund national priorities, a designation that allows for use of federal tax dollars to expedite cleanups. Modern mines among those include the Summitville gold mine in Colorado, the Formosa zinc mine in Oregon, Brewer gold mine in South Carolina and the Gilt Edge mine in South Dakota, all abandoned by owners who reneged on their remediation obligations.<sup>10</sup> Without Congressional action, the situation is not expected to improve. The GAO also reports a serious gap in financial assurance at currently operating mines, recently estimating a shortfall totaling \$61 million at just 52 operations.<sup>11</sup>

Overall, remediation costs for hardrock

mines could run between \$20 and \$54 billion, according to an EPA analysis.<sup>12</sup> A large portion of this cost is certain to fall to taxpayers who will be saddled with the cleanup bill for both old and new mines.

### MODERN MINING RUSH

While efforts to reform the 1872 mining law have languished in Congress over the years, the rapid rise in metal prices and lax U.S. regulations have resulted in an escalating number of new claims. According to a recent analysis of BLM data, the number of active mining claims on federal lands is 39 percent higher today than it was when the 110th Congress convened in January 2007.<sup>13</sup> Many of these new claims have been staked near important and irreplaceable natural areas, including the Grand Canyon, Yosemite and other national parks.<sup>14</sup>

In the case of the Grand Canyon, the rash of new claims for uranium mining within several miles of the park's borders raised such serious concerns about drinking water quality in Nevada<sup>15</sup> and California<sup>16</sup> that the House Natural Resources Committee was compelled to call on the Secretary of the Interior to stop accepting new claims on land near the park,<sup>17</sup> an action supported not only by conservation groups but also by local officials and the governor of Arizona.<sup>18</sup> A decision is still pending.

### CONCLUSION

It is unfortunate that the 110<sup>th</sup> Congress failed to reform the nation's hardrock mining law, allowing a global industry to continue taking billions of dollars in public resources while leaving taxpayers with a multi-billion dollar cleanup bill.

In this time of record deficits, when the budgets of both the federal government and taxpayers are stretched thin, Congress can no longer afford to ignore the billions of dollars in taxpayer liability and potential revenues that are at stake.

As the new Administration and Congress struggle to balance the federal budget and fund critical public programs, they should make reform of the 1872 Mining Law a priority. The price tag for doing nothing is too high.

### ENDNOTES

<sup>1</sup> According to the July 2007 **draft environmental impact statement** issued for the Cortez Hills expansion, the project would involve extraction of an estimated 8 million ounces of gold over a 10-year period. **Barrick Gold Corporation** anticipates approval of the mine expansion in late 2008, with an expected production start within 15 months of the regulatory decision. Assuming a December 2008 decision, mine production would begin in 2010, not 2017 as assumed by the Congressional Budget Office. Had Congress enacted the House bill, the mine would be subject to an 8% rather than a 4% royalty, with a revenue differential for the federal treasury of roughly \$224 million over the life of the mine at a gold price of \$700 per ounce, slightly lower than the **current spot price**.

<sup>2</sup> Thomas D. Kelly *et al.*, "Historical Statistics for Mineral and Material Commodities in the United States," U.S. Geological Survey, Data Series 140, <http://minerals.usgs.gov/ds/2005/140/>.

<sup>3</sup> The \$29 million figure is derived by looking at the revenues that would have been collected over the 5-year period from 2002 through 2006, the latest year for which data is available. To take into account the small operator exemption in Sen. Feinstein's bill, S. 2750, revenues were calculated after applying a discount rate of 10 percent. These revenues ranged from \$17.5 million in 2002 to \$48.7 million in 2006. This estimate does not presume that the 2006 production levels would be maintained, but uses the average value from the 5-year period.

- <sup>4</sup> April 23, 2008, letter to Senator Jeff Bingaman, Chairman, and Senator Pete Dominici, Ranking Member of the Senate Environment and Natural Resources Committee, signed by Senators Feingold and Sununu as well as Senators Maria Cantwell (D-WA), Judd Gregg (R-NH), Jack Reed (D-RI), Sheldon Whitehouse (D-RI), Robert Menendez (D-NJ), Olympia Snowe (R-ME), Ben Cardin (D-MD) and Bernard Sanders (I-VT).
- <sup>5</sup> “Feingold, Cantwell Bill Would End Outdated Tax Breaks for Mining on Public Land,” press release, Office of Senator Russ Feingold, November 1, 2007, <http://feingold.senate.gov/~feingold/releases/07/11/20071101mining.html>.
- <sup>6</sup> Based on queries of the U.S. EPA TRI Explorer database containing industry-submitted information on toxic releases.
- <sup>7</sup> Data for 2005 and 2006 combined, based on queries of the U.S. EPA TRI Explorer database.
- <sup>8</sup> Statement of Robin M. Nazzaro, Director, Natural Resources and Environment, Government Accountability Office, “Information on Abandoned Mines and Value and Coverage of Financial Assurances on BLM Land,” testimony before the Senate Committee on Energy and Natural Resources, GAO-08-574T, March 12, 2008, <http://www.gao.gov/new.items/d08574t.pdf>.
- <sup>9</sup> Inspector General, U.S. Department of the Interior, Final Audit Report: Abandoned Mine Lands in the Department of the Interior, July 22, 2008, C-IN-MOA-0004-2007, p. 1, [www.doioig.gov/upload/2008-G-00241.pdf](http://www.doioig.gov/upload/2008-G-00241.pdf).
- <sup>10</sup> Environmental Protection Agency, NPL Site Status Information, [www.epa.gov/superfund/sites/npl/status.htm](http://www.epa.gov/superfund/sites/npl/status.htm).
- <sup>11</sup> Statement of Robin M. Nazzaro, *op. cit.*
- <sup>12</sup> U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, “Cleaning Up the Nation’s Waste Sites: Markets and Technology Trends,” 2004 Edition, EPA 542-R-04-015, September 2004, p. 1-12, <http://www.clu-in.org/download/market/2004market.pdf>.
- <sup>13</sup> Based on queries of BLM LR2000 database.
- <sup>14</sup> Judy Pasternak, “A Grand Canyon rush for uranium,” *Los Angeles Times*, May 4, 2008, and Margot Roosevelt, “Mining claims seen as threat,” *Los Angeles Times*, October 16, 2007.
- <sup>15</sup> June 16, 2008, letter to the Honorable Dirk Kempthorne, Secretary of Interior, from Patricia Mulroy, General Manager, Southern Nevada Water Authority.
- <sup>16</sup> March 25, 2008, letter to the Honorable Dirk Kempthorne, Secretary of Interior, from Jeffrey Kightlinger, General Manager, Metropolitan Water District of Southern California.
- <sup>17</sup> Eric Bontrager, “Interior fights House panel on Grand Canyon withdrawal,” *Environment and Energy Daily*, July 18, 2008.
- <sup>18</sup> **March 6, 2008, letter** to the Honorable Dirk Kempthorne, Secretary of Interior, from the Honorable Janet Napolitano, Governor of Arizona.

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